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### EMI1.1

During the conventional adhesive bond of books the next to each other disposed crease elbow of the book block at the so called Bundsteg becomes for example in such a manner processed by milling that single sheets develop, which are glued subsequent.

This type of the connection possible a relative good flat couch behavior of the book, has however a relative poor durability, so that the books in the area of the collar break apart after shortest time. The cause for this consists in particular of the fact that the glue laid on on the backbones does not connect the single sheets into sufficient measures. Here in particular the area between two sheets is particularly problematic.

With the very often used painted paper a chalk layer is applied in each case on der'Ober and underside of the sheets. The adhesive penetrates in the area of the Bundsteges into the paper structure and connects the single sheets. In the area of the laid on chalk layer however the adhesive cannot penetrate, so that in this area a insufficient connection develops, which can break open after short use.

The avoidance of this problem the connection becomes supported with hö herwertigen books by thread attaching. Several crease elbow, for example four crease elbow, becomes into one another-inserted and by thread attaching as well as

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Gluing with the gauze connected. This type of the connection is right stable, but one takes for it different disadvantages in purchase. So reliable prevented cannot become that in the area of the needle partings of the thread attaching glue penetrates through the holes and it comes then between the sides to the so called " windowpane effect ". Beyond that books with thread attaching have a relative poor flat couch behavior, so that for example the effect of images, which overflow in the area of the collar of one on the other side, is strong impaired.

The invention is the basis the object to indicate a book as an adhesive bond who exhibits a significant increased durability of the connection.

This object becomes according to invention by the features of the claim 1 dissolved.

Other embodiments of the invention are subject-matter

### EMI2.1

Book block from a variety of quadrilateral, next to each other disposed crease elbow exists, which are glued with one another in the crease edge range.

Particularly with use of painted paper the crease edge range becomes the crease elbow in such a manner processed, - that the adhesive used with the gluing can penetrate in the

crease edge range into the crease elbow, so that a durable connection between the paper fibers, the glue and the gauze develops.

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In a special embodiment of the invention a fixed Buchdecke is provided, which edges a moving exhibits, whereby the Buchdecke is in the area of the Rückenante with the book block connected. Appropriately a gauze becomes provided, which with the crease edge range the crease elbow is glued and with the Rückenante of the Buchdecke.

As a result of the bond the single quarterly elbow within the crease edge range arises opposite the milled Bundsteg in the case of the conventional adhesive bond one around for instance the 1,5-Fache enlarged attack region for the adhesive. Thus also a corresponding enlarged durability of the connection is ensured. With use from painted paper the crease edge range becomes broken or otherwise processed, so that the adhesive can penetrate over the whole area into the fiber structure of the crease elbow. Other advantages and embodiments of the invention become more near explained on the basis the subsequent description of an embodiment and the drawing.

In the drawing Fig show. erfin book and Fig would dung-in accordance with-eat 1 a cross section representation one. 2 an enlarged cross section representation in the area of the backbone.

The book explained in the drawing essentially consists of a Buchdecke 1 and a book block 2, whereby the Buchdecke by fixed upper book DEK

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kel 1a and a fixed lower book cover 1b formed becomes.

In the following becomes first on the type of the connection on the basis the Fig. 2 more near received: The book block 2 consists of a variety of quadrilateral, next to each other disposed crease elbow 2a, which is glued with one another in the crease edge range 2b. The glueing made bottom aid of a gauze 3 as well as a suitable adhesive 4.

With this type of the connection for the fact concern is to inertial that the crease edge range 2b the crease elbow 2a the penetration of the adhesive into the fiber range the crease elbow permitted. With use of painted paper, is 5 applied with which on the surface a chalk layer, as in Fig. 2 Illustrated is, must the crease elbow within its crease edge range 2b in such a manner processed become that the adhesive used with the glueing can penetrate 4 in the crease edge range into the crease elbow. This processing can take place for example via the fact that with the grooving consciously a fracture of the paper line made. By this measure the sufficient penetration of the adhesive within the crease edge range becomes ensured also with painted paper.

In the drawing the penetration of the adhesive with arrows is characterized.

As a result of the curved crease edge range 2b the quadrilateral, next to each other disposed crease elbow arises in relation to the conventional connection, with in the area of the Bundsteges a milling made, one around that about 1, 5-fold increased attack region for the adhesive 4.

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Those the invention underlying examinations have shown the fact that itself thereby 50% higher stop barkeit than in the case of a conventional adhesive bond results in.

During the connection according to invention appropriately a fixed Buchdecke used becomes, those in Fig. 2 with the reference numeral 1,2 and a Rückenante 1 is provided. 2. A exhibits. The Buchdecke is in the area of its Rückenante 1. 2. A with the book block glues.

Like in particular from Fig. 1 apparent becomes, is the upper and lower book cover 1,1 and 1,2 complete from each other separated. The connection with the book block 2 happens at the one in the area of the spine with Begazung and bond, like in Fig. 2 more near shown.

Beyond that the book exhibits a Schutzumschlag 8, which is fixed with the Buchdecke in the area of the upper and lower book cover bonded, excluded a 3 mm wide edge parallel to the backbone both in front and in the back as well as the spine.

A fixed Schutzumschlag connected with the Buchdecke has the advantage to that it cannot slip during the use of the book, and it can besides without the embossment and label of the Buchdecke is done. The Schutzumschlag 8 can become beyond that due to a corresponding thinner material substantial economical marked and/or embossed.

Vorsatz-und the trailer record sheet 6.7 are as usual on the inside of the Buchdecke bonded, during that

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Schutzumschlag 8 at least on the outside of the Buchdecke bonded becomes. In the represented remark with play is the Schutzumschlag 8 around the front edge on the inside of the book cover pulled and takes off there still for instance the half of the inner surface.

The Buchdecke can become with this embodiment relative simple, for example by a paperboard from 0,8 to 2.0 mm or more formed. There this fixed Buchdecke with Vorsatz- bzw. Trailer record sheet as well as the Schutzumschlag covered is, can without an expensive label and/or embossment of the Buchdecke be done.

Vorsatz-und trailer record sheet 6.7 leaves itself with the Buchdecke (book cover 1,1 and/or. 1.2) in such a manner glue that Vorsatz-und the trailer record sheet exhibit a smooth surface. During the conventional connection usually unpleasant beads in the edge area of Vorsatz-und trailer record sheet, which arise from the lamination of the conventional book cover and as a result of gluing the gauze to on the inside of the book cover, develop.

The opened book exhibits an excellent flat couch behavior, so that in particular also within the federation range no shadowing develops. Beyond that inside an image current over the collar can become printed with each quadrilateral crease elbow, which affected negative in its quality by poor Passer in the area of the collar is not. Since no thread attaching becomes provided, also no needle partings result, from the glue penetrate, which could lead to a damage of the image.

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Although the single sheets do not become fixed by additional thread attaching, one results ausseror dentlich good durability of the connection, which is appropriate for about 50% higher, as during a conventional adhesive bond.

An other advantage consists also of the fact that the backbone is movable formed and arises as a result of it 1800 a flat couch behavior, whereby problem-free opening as well as unobstructed Umblättern a possible become.